



FEMA

# Discovery Meeting: Salt River Watershed

Shepherdsville, Kentucky

January 5, 2011

**RiskMAP**  
Increasing Resilience Together



# Introductions

- **Risk MAP Project Team**
- **Local Officials**
- **State Officials**
- **Federal Government Officials**
- **Private sector representatives**
- **Associations/non-profit representatives**

# Why We're Here

- **Flood risk changes over time**
- **We chose your watershed to review due to risk and significant development in the watershed**
  - Currently doing flood studies in watershed
  - Continuation of ongoing process in Bullitt and Jefferson Counties
- **A complete, current picture of your flood hazards and risks will help you better:**
  - Plan for the risk
  - Take action to protect your communities
  - Communicate the risk to your citizens

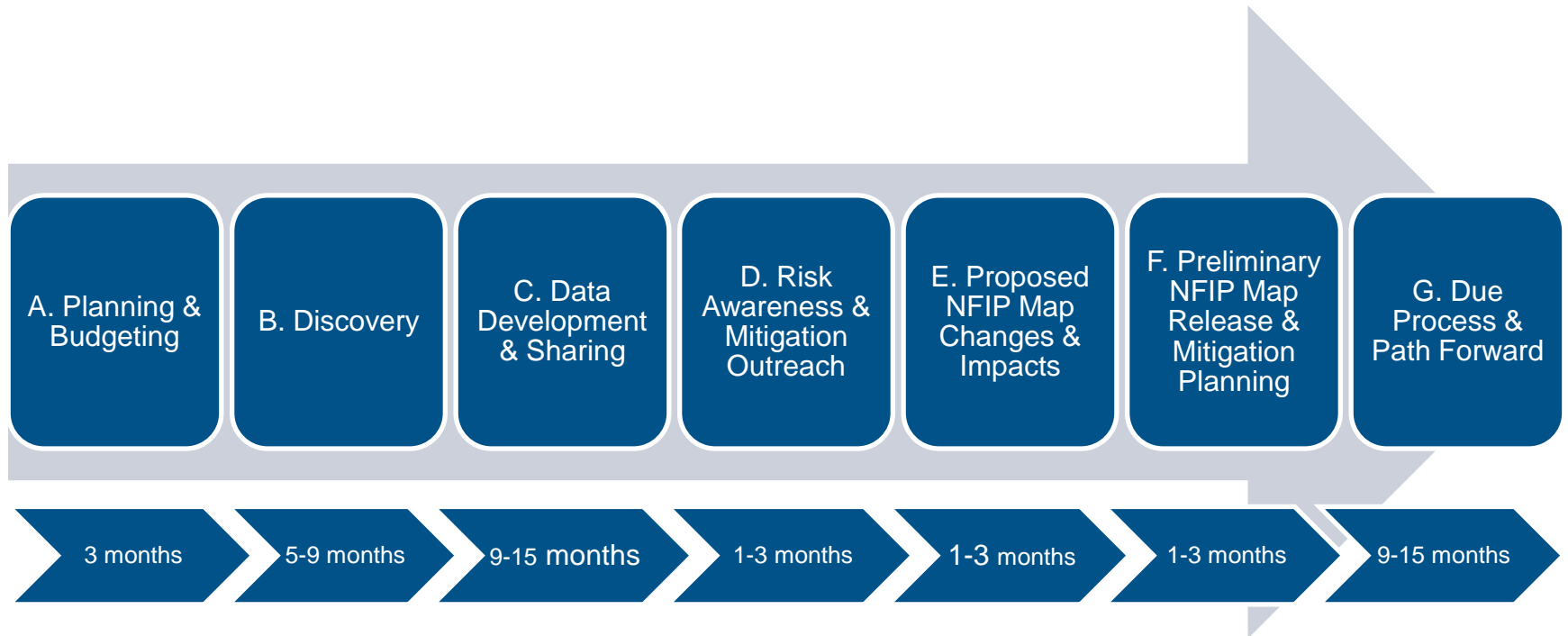
# What is Risk MAP?

- **Risk Mapping Assessment & Planning (MAP)**
  - Mapping – Flood Hazard and Risk Identification
  - Assessment – HAZUS and other Risk Assessment tools
  - Planning – Hazard Mitigation Plans
  
- **Risk MAP Mission**
  - Deliver quality data
  - Promote better public awareness of flood risk
  - Inspire actions that reduce risk

# Risk MAP continued...

- **Through Risk MAP, FEMA works with communities to develop flood risk products and flood maps that are:**
  - Based on the best available data from the community and latest technologies
  - Conducted by watershed
  - Strengthened by partnerships
- **You can use Risk MAP tools and data to:**
  - Create or improve your mitigation plans
  - Make informed decisions about development or ordinances
  - Communicate more effectively about flood risk to citizens

# Risk MAP Project Timeline



3-5 Year Process

# Discovery

- **Discovery helps determine the areas within your watershed where a flood risk study is needed**
- **During Discovery, we work together to:**
  - Review local flood risk and hazards
  - Understand local mitigation capabilities, hazard risk assessments, and current or future mitigation activities
  - Collect information about flooding history, development plans, daily operations, and stormwater and floodplain management activities

# Discovery Meeting Objectives

- Review the flood risk data we've collected and reviewed so far
- Identify and discuss areas of concern
- Discuss a watershed vision
- Stress the importance of mitigation plans and risk communication

# Salt River Watershed

# Salt River Watershed communities

- The Salt River Watershed contains or touches:
  - 11 counties
  - 25 cities
  - 4,127 total stream miles
  - Over 1 million residents

Community	CID	Population*
BARDSTOWN, CITY OF	210178	1745
BLOOMFIELD, CITY OF	210179	1259
CRESTWOOD, CITY OF	210027	1233
DANVILLE, CITY OF	210019	1
ELIZABETHTOWN, CITY OF	210095	2030
EMINENCE, CITY OF	210402	2367
FAIRFIELD, CITY OF	210424	328
FORT KNOX	21FED	12216
FOX CHASE, CITY OF	210385	582
HARRODSBURG, CITY OF	210172	9327
HEBRON ESTATES, CITY OF	210386	1476
HILLVIEW, CITY OF	210384	12397
HUNTERS HOLLOW, CITY OF	210387	971
LAGRANGE, CITY OF	210117	3310
LAWRENCEBURG, CITY OF	210003	8069
MOUNT WASHINGTON, CITY OF	210382	13118
PEWEE VALLEY, CITY OF	210103	3562
PIONEER VILLAGE, CITY OF	210383	1113
RADCLIFF, CITY OF	210366	21039
SHELBYVILLE, CITY OF	210376	13050
SHEPHERDSVILLE, CITY OF	210028	11095
SIMPSONVILLE, CITY OF	210431	1845
SMITHFIELD, CITY OF	210404	251
TAYLORSVILLE, CITY OF	210247	1184
WEST POINT, CITY OF	210097	537
ANDERSON COUNTY, UNINCORPORATED	210002	10508
BOYLE COUNTY, UNINCORPORATED	210322	2141
BULLITT COUNTY, UNINCORPORATED	210273	51215
HARDIN COUNTY, UNINCORPORATED	210094	9835
HENRY COUNTY, UNINCORPORATED	210110	3125
JEFFERSON COUNTY, UNINCORPORATED	210121	227728
MERCER COUNTY, UNINCORPORATED	210306	10544
NELSON COUNTY, UNINCORPORATED	210177	13200
OLDHAM COUNTY, UNINCORPORATED	210185	23164
SHELBY COUNTY, UNINCORPORATED	210209	27218
SPENCER COUNTY, UNINCORPORATED	210211	13439

\* - this field shows the communities' population within the watershed

# Data Collected to Date

- **You have provided us with the following data so far:**
  - Development and floodplain management plans
  - Infrastructure information for levees and new bridges, dams, culverts, and road improvements
  - Building footprints (LOJIC)
  - Parcel data (LOJIC and Oldham County Geographic Information Consortium (OGIC))
  - Hydrography and transportation layers (LOJIC)
  - Political boundaries (KY Geography Network and KY Division of Geographic Information (DGI))
  - Elevation data (LOJIC)
  - Regional watershed plans
  - Information about your flood risk communication processes

# Additional Data Reviewed to Date

- **In addition, we've reviewed data we had available:**
  - Your FEMA-approved mitigation plans (BGADD, KIPDA, LTADD and Louisville Metro)
  - Previous flood studies conducted here
  - The number of flood insurance policies and claims within your watershed
  - Letters of Map Amendment and/or Revision
  - Average Annualized Loss (AAL) information
  - Census data
  - Federal and State disaster information

# KY Risk MAP FY09 status: Bullitt County

- **Scoping meeting held in April 2010**
- **Work includes:**
  - 14 miles of a detailed study on Salt River (Zone AE)
  - 69 miles of redelineated detailed studies (Zone AE)
  - 29 miles of limited detailed studies (Zone AE)
  - 111 miles of restudied approximate zones (Zone A)
  - 53 miles of new approximate zones (Zone A)
- **Basemap, topographic data collection, surveying and hydrology tasks are complete**
- **Hydraulics is in QA/QC**
- **Preliminary maps scheduled for Spring 2011**

# KY Risk MAP FY09 Status: Jefferson County

- **Scoping meeting held in June 2010**
- **Work includes:**
  - 32 miles of detailed studies (Zone AE)
  - 93 miles of limited detailed studies (Zone AE)
  - 94 miles of detailed leverage study in Mill Creek watershed (Zone AE)
- **Basemap, topographic data collection, surveying and hydrology tasks are complete**
- **Dam Inundation Analyses for McNeely Lake Dam in Jefferson County & north Bullitt County**
- **Preliminary maps scheduled for Spring 2011**

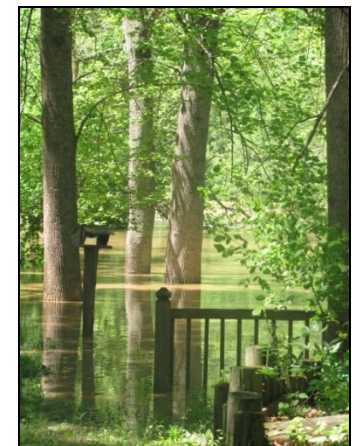
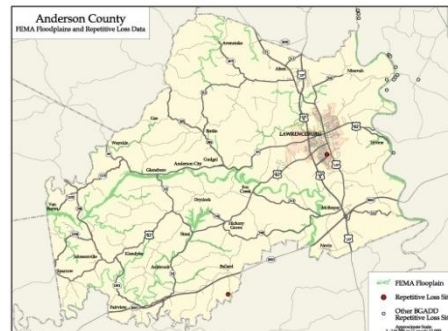
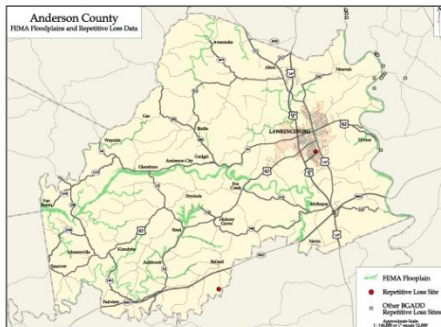
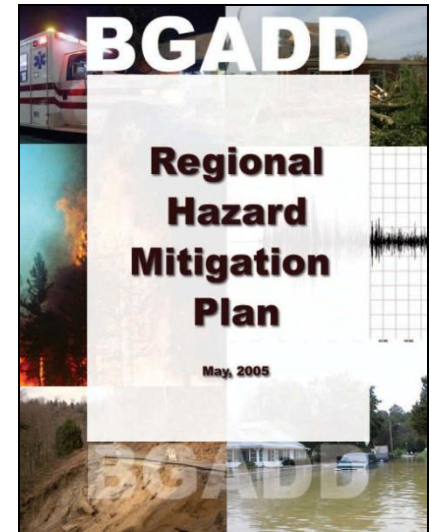


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# Examples of Areas of Concern

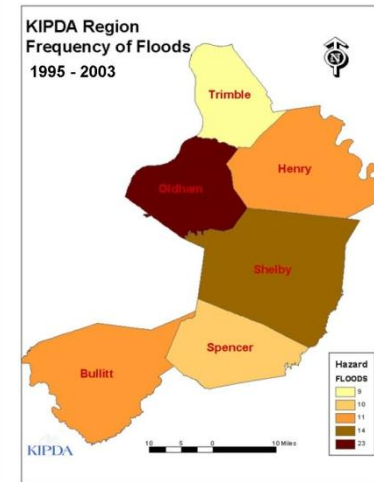
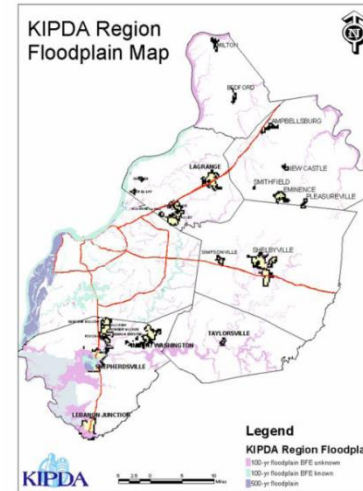
- **BGADD (Anderson, Boyle and Mercer Counties)**
  - Possible mitigation solutions identified in plan
    - Construction of retention/detention basins in floodprone areas
    - Identified flood prone areas: McCormick Lane, Hammonds Lane and East Broadway to the Industrial Park
    - Elevation of critical structures



Flooding in Lawrenceburg

# Examples of Areas of Concern

- **KIPDA (Bullitt, Henry, Oldham, Shelby and Spencer Counties)**
  - Potential study needs
    - Identification and mapping of bridges that need to be elevated to prevent damage and flooding
    - Creation of GIS database:
      - Inventory of critical facilities and structures in each hazard area
      - Track repetitive loss structures
  - Possible mitigation solutions
    - Removal of debris from streams
    - Educate citizens of their location in hazard areas

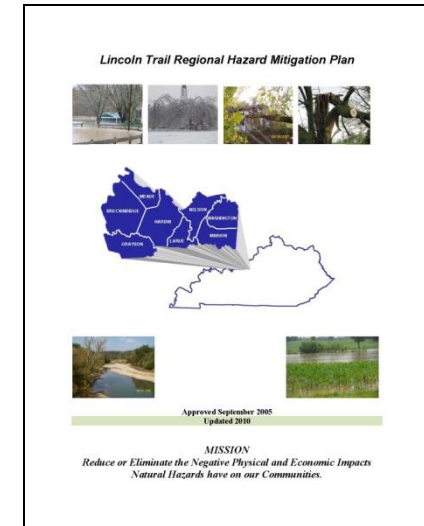
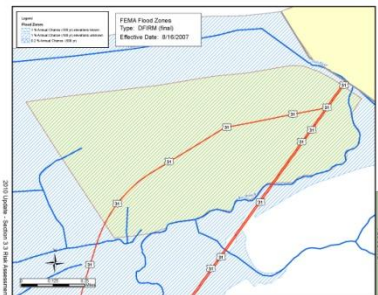


Source: National Weather Service, National Climatic Data Center



# Examples of Areas of Concern

- **LTADD (Hardin and Nelson Counties)**
  - Flooding and Flash Flooding significantly affect the region
  - Possible study needs:
    - Solutions to flash flooding problems at Hwys 162, 55 and 62 in Nelson County
    - Simpson Creek bridge flooding
  - Possible mitigation solutions:
    - Acquisition and demolition of repetitive loss structures, throughout both counties



■ **Louisville Metro**

- [illegible]



# Local Activities that Affect Flood Risk

- **Upcoming activities that may affect your flood risk**
  - Development plans
  - Planned mitigation activities
- **Local activities you currently take to address flood risk**
  - Stormwater management activities
  - Floodplain management activities
  - Daily operations

# Mitigation Planning in Your Watershed

# Mitigation Planning

## ■ Hazard mitigation plans:

- Can help guide your decisions on mitigation activities for all hazards you face
- Are an important resource responsible for responding to disasters
- Can help you apply for assistance to take action

## ■ We reviewed your mitigation plans and found that:

- Goals are flooding prevention, property protection and public awareness
- Interest in purchasing repetitive loss structures



# Mitigation Plan Updates

- **Risk MAP flood risk tools can help you enhance the flood portion of your plans**
  - Provide risk analyses and assessments that can bolster your plan
  - Can help you identify and prioritize flood mitigation activities
- **Mitigation planning resources**
  - A wide range of planning technical assistance is available through Risk MAP
  - Types of assistance will be determined once areas of study are identified

# Salt River Watershed HMPs

- **Bluegrass HMP**

- Regional Plan, 2005 (includes Anderson, Boyle and Mercer Counties)
- Plan is being updated. Will be complete in December 2011

- **KIPDA Enhanced HMP, June 5, 2010**

- Includes Bullitt, Henry, Oldham, Shelby and Spencer Counties

- **Lincoln Trail HMP, Approved 2005, Updated 2010**

- Hardin and Nelson Counties

- **Louisville Metro Multi-Hazards Mitigation Plan, 2005**

- Produced annual progress reports, 2006-2009

# Vision for Your Watershed

- **A watershed vision is important to:**
  - Highlight that individual mitigation actions may affect others up and downstream
  - Help you work together to achieve a more resilient watershed

# Risk Communication in Your Watershed

# Risk Communication

- **Citizens look to local officials to keep them informed of flood risk**
- **Regular communication is important regarding:**
  - Flood hazard and risk information
  - Steps they can take to protect their families and property
- **Risk MAP provides information to help you communicate about flood risk, including:**
  - Flood risk products written in plain English
  - Template for a community outreach plan
  - Draft letter to citizens
  - Media materials related to flood risk

# Taking Action

- Mitigation and risk reduction can only happen at the local level
- Risk MAP can provide:
  - Risk identification and awareness
  - Education on mitigation alternatives
  - Technical assistance
- FEMA can provide:
  - Hazard Mitigation Grant Program (HMGP) funding
  - Pre-Disaster Mitigation (PDM) funding
  - Other sources of funding

# Next Steps

- **We will provide you with:**
  - An updated Discovery Map that reflects our discussion
  - A Discovery Report that summarizes the data collected
- **Based on today's discussion, we will determine areas for further study through Risk MAP and provide:**
  - A draft project charter
  - A draft project scope
- **We look forward to continuing to work with you to help your watershed become more resilient to flooding**



# FEMA



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